

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Applicant:	<b>BERTI et al.</b>	Application No.:	10/661,263
Filing Date:	September 12, 2003	Confirmation No.:	7788
Examiner:	Chad S. Dickerson	Attorney Docket:	600.1289
Art Unit:	2625	Customer No.:	23280
Title:	<b>METHOD AND DEVICE FOR OPTIMIZING A JOB CHANGE</b>		

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Commissioner for Patents  
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April 22, 2010

**APPEAL BRIEF UNDER 37 C.F.R. § 41.37**

Sir:

Appellants submit this brief for the consideration of the Board of Patent Appeals and Interferences (the “Board”) in support of their appeal of the Rejection dated December 29, 2009 in this application. The statutory fee of \$540.00 for filing an appeal brief was paid with the Appeal Brief filed September 15, 2009. If any additional fees are deemed to be due at this time, the Assistant Commissioner is authorized to charge payment of the same to Deposit Account No. 50-0552.

## REAL PARTY IN INTEREST

The real party in interest is Heidelberger Druckmaschinen AG, a corporation having a place of business in Heidelberg, Germany, and the assignee of the entire right, title and interest in the above-identified patent application. The invention was assigned to Heidelberger Druckmaschinen AG by an assignment from inventors Christopher Berti, Bernhard Buck, Holger Faulhammer, Michael Krueger, Juergen Maass, Sven Mader, Stefan Maier, Kai Oskar Mueller, Matthias Noell, Riese Martin and Bernhard Roskosch. The assignment was recorded on December 22, 2003 at reel 014821, frame 0795.

## I. RELATED APPEALS AND INTERFERENCES

Appellants, their legal representatives, and assignee are not aware of any appeal, interference or judicial proceeding that directly affects, will be directly affected by, or will have a bearing on the Board's decision in this appeal.

## II. STATUS OF CLAIMS

Claims 1 to 25 are pending. Claims 1 to 18 have been finally rejected by the Examiner and claims 1 to 25 currently stand rejected as per the Office Action dated December 29, 2009.

The rejection of claims 1 to 25 thus is appealed. A copy of pending claims 1 to 25 is attached hereto as Appendix A.

## III. STATUS OF AMENDMENTS

Claims 1, 2, 13 and 16 to 18 were amended as suggested by the Examiner after the rejection of claims 1 to 25 in the Office Action dated December 29, 2009 to correct the language the Examiner indicated was indefinite. A Notice of Appeal was filed and received by the U.S.P.T.O. on February 24, 2010.

#### IV. SUMMARY OF THE CLAIMED SUBJECT MATTER

Independent claim 1 recites a method for determining an optimum procedure for a job change between a first machine job and a subsequent machine job on a printing-material processing machine having at least one control computer (e.g., printing press 10 and control console 30 in Fig. 1, specification at page 7, lines 5 to 6, paragraph [0019], page 8, lines 1 to 6, paragraph [0021]), the method comprising comparing first data of the first machine job to second data of the subsequent machine job using the at least one control computer (e.g., specification at page 2, lines 13 to 16, paragraph [0006], page 8, lines 1 to 6, paragraph [0032]), and establishing an order of adjustments and maintenance operations to be carried out during the job change between the first machine job and the subsequent machine job as a function of the comparing step (e.g., specification at page 2, lines 13 to 16, paragraph [0006], page 8, lines 1 to 6, paragraph [0032]); wherein the adjustments and maintenance operations to be carried out during the job change are performed on at least two different components of the printing press to prepare the at least two components for printing the subsequent machine job (e.g., specification at page 8, lines 13 to 20, paragraph [0022]).

Independent claim 8 recites a device for determining an optimum procedure for a job change on a printing-material processing machine (e.g., printing press 10 in Fig. 1, page 7, lines 5 to 6, paragraph [0019]) comprising at least one control computer comparing first data of a first machine job to second data of a subsequent machine job, and executing program steps as a function of the comparing step to establish an order of operations to be carried out during the job change (e.g., control console 30 in Fig. 1, specification at page 8, lines 1 to 6, paragraph [0021], page 2, lines 13 to 16, paragraph [0006]); wherein the operations to be carried out during the job change are performed on at least two different components of the printing press to prepare the at least two components for printing the subsequent machine job (e.g., specification at page 8, lines 13 to 20, paragraph [0022]).

Independent claim 13 recites a printing press (e.g., printing press 10 in Fig. 1, page 7, lines 5 to 6, paragraph [0019]) comprising a device for determining an optimum procedure for a job change between a first machine job and a subsequent machine job on a printing-material

processing machine, the device including at least one control computer comparing first data of the first machine job to second data of the subsequent machine job, and executing program steps as a function of the comparing step to establish an order of adjustments and maintenance operations to be carried out during the job change between the first machine job and the subsequent machine job (e.g., control console 30 in Fig. 1, specification at page 8, lines 1 to 6, paragraph [0021], page 2, lines 13 to 16, paragraph [0006]); wherein the adjustments and maintenance operations to be carried out during the job change are performed on at least two different components of the printing press to prepare the at least two components for printing the subsequent machine job (e.g., specification at page 8, lines 13 to 20, paragraph [0022]).

Dependent claim 3 recites the method as recited in claim 1 wherein a number of operating personnel of the printing-material processing machine is taken into account in the determination of the optimum procedure (e.g., specification at page 2, lines 18 to 30, paragraph [0008]).

Dependent claim 4 recites the method as recited in claim 1 wherein a length of paths to be traveled by operating personnel of the printing-material processing machine while carrying out the order of processes is taken into account in the determination of the optimum procedure (e.g., specification at page 3, lines 1 to 8, paragraph [0009]).

Dependent claim 6 recites the method as recited in claim 5 wherein the operating personnel are guided through individual steps of a calculated order of processes via one or more display devices mounted on the printing-material processing machine (e.g., specification at page 4, lines 16 to 24, paragraph [0011]).

Dependent claim 7 recites the method as recited in claim 1 wherein the established order of processes is communicated to operating personnel in acoustic form (e.g., specification at page 5, lines 13 to 20, paragraph [0022]).

Dependent claim 9 recites the device as recited in claim 8 further comprising one or more display devices for displaying the order of operations (e.g., monitors 31 in Fig. 1, specification at page 8, lines 1 to 11, paragraph [0021]).

Dependent claim 10 recites the device as recited in claim 8 further comprising a system for acoustic communication of the established order of operations to operating personnel (e.g., specification at page 10, lines 1 to 8, paragraph [0026]).

Dependent claim 16 recites the method as recited in claim 1 wherein the establishing step includes accessing a table containing durations of the adjustments and maintenance operations (e.g., Fig. 2, specification at page 8, line 26 to page 9, line 2, paragraph [0023]).

Dependent claim 18 recites the method as recited in claim 1 wherein the establishing step includes determining if a first of the adjustments and maintenance operations should occur prior to a second of the adjustments and maintenance operations (e.g., Fig. 2, specification at page 8, line 26 to page 9, line 2, paragraph [0023]).

Dependent claim 19 recites the method as recited in claim 1 wherein the establishing step includes identifying adjustments and maintenance operations to be carried out during the job change between the first machine job and the subsequent machine job and then determining when the adjustments and maintenance operations are to be carried out with respect to one another during the job change as a function of the comparing step. (e.g., specification at page 8, line 26 to page 9, line 19, paragraphs [0023] to [0024], page 1, lines 19 to 23, paragraph [0004], page 2, lines 13 to 16, paragraph [0006]).

Dependent claim 20 recites the method as recited in claim 1 wherein the establishing step includes determining which steps can be performed concurrently and which steps must be performed consecutively (e.g., specification at page 8, line 28 to page 9, line 2, paragraph [0023]).

Dependent claim 21 recites the method as recited in claim 3 wherein the order of adjustments and maintenance operations depends on the number of operating personnel of the printing-material processing machine in such a manner that an increased number of operating personnel results in an increased number of steps being performed concurrently (e.g.,

specification at page 3, lines 18 to 30, paragraph [0008], page 8, lines 20 to 24, paragraph [0022]).

Dependent claim 22 recites the method as recited in claim 1 wherein a first component of the at least two components is an inking unit and a second component of the at least two components is a plate cylinder (e.g. inking unit 22 and plate cylinder 21 in Fig. 2, specification at page 7, lines 13 to 20, paragraph [0019], page 9, lines 4 to 19, paragraph [0024]).

Dependent claim 23 recites the method as recited in claim 1 wherein one of the at least two components is an offset printing cylinder (e.g., printing cylinder 20 in Fig. 1, Fig. 2, specification at page 7, lines 17 to 20, paragraph [0019]).

Dependent claim 24 recites the method as recited in claim 1 wherein one of the at least two components is a coating unit (e.g., coating unit 19 in Fig. 1, Fig. 2, specification at page 7, lines 8 to 9, paragraph [0019], page 9, lines 4 to 19, paragraph [0024]).

Dependent claim 25 recite the method as recited in claim 1 wherein a first component of the at least two components and a second component of the at least two components are driven independently of one another (e.g., specification at page 7, lines 13 to 20, paragraph [0019]).

## VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1, 2, 8, 13, 17 to 22 and 25 were rejected under 35 U.S.C. 103(a) as being unpatentable over Zingher et al. (U.S. Pat. No. 5,930,468) in view of Loffler (U.S. Pat. No. 5,010,820). Claim 3 was rejected under 35 U.S.C. 103(a) as being unpatentable over Zingher et al. as modified by Loffler and further in view of Rai et al. (U.S. Pub. No. 2003/0149747). Claim 4 was rejected under 35 U.S.C. 103(a) as being unpatentable over Zingher et al. as modified by Loffler and further in view of Yacoub (U.S. Pub. No. 2003/0011805). Claims 5, 6, 9 and 12 were rejected under 35 U.S.C. 103(a) as being unpatentable over Zingher et al. as modified by Loffler and further in view of Bauer (U.S. Pub. No. 2001/0039461). Claims 7 and 10 were rejected under 35 U.S.C. 103(a) as being unpatentable over Zingher as modified by Loffler and

Bauer and further in view of Tada (U.S. Patent 4,572,652). Claim 11 was rejected under 35 U.S.C. 103(a) as being unpatentable over Zingher et al. as modified by Loffler, Bauer and Tada and further in view of Silvester (U.S. Pub. No. 2003/0161292). Claims 14, 15, 23 and 24 were rejected under 35 U.S.C. 103(a) as being unpatentable over Zingher et al. as modified by Loffler and further in view of Pfeiffer et al. (U.S. 5,447,102). Claim 16 was rejected under 35 U.S.C. 103(a) as being unpatentable over Zingher et al. in view of Loffler, Bauer and Jackson et al. (U.S. 7,064,848).

## VII. ARGUMENTS

### A. Rejections under 35 U.S.C. 103(a): Zingher et al and Loffler

Claims 1, 2, 8, 13, 17 to 22 and 25 were rejected under 35 U.S.C. 103(a) as being unpatentable over Zingher et al. in view of Loffler.

#### 1. Claims 1, 2, 17 to 22 and 25

Zingher et al. is discussed in detail in paragraph [0004] of the present specification, which states:

German Patent No. DE 196 31 469 C1, related to U.S. Patent No 5,930,468 which is hereby incorporated by reference herein, describes a method which is intended to optimize and minimize the set-up and downtimes for several changes between several consecutive print jobs. To this end, the method uses a data processing system that controls a printing press so as to bring the pending print jobs into such an order that the set-up and downtimes during the print job changes to be carried out will be as short as possible. To this end, the image contents of different print jobs are compared image element by image element as well as their respective color separations, making it possible to predict the operations for making printing forms and to establish the order of print jobs on the basis of the totality of operations. Thus, it is known from German Patent No. DE 196 31 469 to calculate the order of print jobs in a manner allowing the print jobs, including print jobs changes, to be carried out in as short an overall time as possible. However, the procedure known from the prior art mentioned in the previous section is only successful if a certain number of print jobs is known in advance so that they can be brought into a specific optimum order. According to the prior art, however, a single change between two print jobs cannot be optimized.

Loffler discloses a process for the defined production of an ink distribution appropriate to a production run in the inking unit of rotary printing presses. "To create an ink distribution in the inking unit appropriate to the print run during the conversion of the inking unit from a previous job to a subsequent and new print job, the invention provides an improved method for the removal of the current ink profile so that the new ink profile can be established for the subsequent print job in a short time, without the necessity of emptying, cleaning and washing the inking unit." (Loffler, abstract).



Claim 1 recites “[a] method for determining an optimum procedure for a job change between a first machine job and a subsequent machine job on a printing-material processing machine having at least one control computer, the method comprising:

comparing first data of the first machine job to second data of the subsequent machine job using the at least one control computer, and

establishing an order of adjustments and maintenance operations to be carried out during the job change between the first machine job and the subsequent machine job as a function of the comparing step;

wherein the adjustments and maintenance operations to be carried out during the job change are performed on at least two different components of the printing press to prepare the at least two components for printing the subsequent machine job.” Claims 2, 17 to 22 and 25 are dependent on claim 1.

In the December 29, 2009 Office Action (“the Office Action”) the Examiner first alleges that rearranging of the order of the print jobs in Zingher et al. based on the pixel by pixel comparison corresponds to “establishing an order of operations to be carried out during the job change between the first machine job and the subsequent machine job as a function of the comparing step” as recited in claim 1. (The Office Action, page 7). The Examiner then alleges Zingher et al. discloses “establishing an order of adjustments and maintenance operations to be carried out during the job change between the first machine job and the subsequent machine job as a function of the comparing step” (emphasis added) as recited in claim 1. (The Office Action, pages 7 and 8). Relating to the “establishing” step of claim 1, the Examiner states:

Since the reference of Zingher ‘468 discloses the feature of changing an ink profile and the reference can perform changing this profile using jobs of single color being transitioned to jobs of multiple colors, it is understood that the process of changing the printing ink in terms of color is performed. In terms of establishing an order of these operations, with each job, a certain change can occur. To transition from job 1 to job 2, a slight change in ink profile may be needed, then changing to job 3 may require a change in the printing form and a change to job 4 may require a film thickness gradient change in the inking unit. Since these different operations can be different depending on the content of the jobs, these operations change, but they have to be established when going from job to job in the system in order to ensure a minimum amount of work for the printing system while changing from job to job. Therefore, since a certain adjustment process can occur for different jobs in different

ways and this is established in order for the jobs to be processed, it is believed that the above feature is performed. (The Office Action, page 8) (emphasis added).

The Examiner then states that Zingher et al. does not disclose “wherein the adjustments and maintenance operations to be carried out during the job change are performed on at least two different components of the printing press to prepare the at least two components for printing the subsequent machine job” as recited in claim 1, but alleges that this deficiency of Zingher et al. is cured by the disclosure in Loffler of “adjusting ink metering elements and ink duct rollers for removal of an old profile.” (The Office Action, page 9).

It is respectfully submitted that neither Zingher et al. nor Loffler, alone or in combination, discloses the step of claim 1 of “establishing an order of adjustments and maintenance operations to be carried out during the job change between the first machine job and the subsequent machine job as a function of the comparing step.” (emphasis added). Zingher et al. clearly does not explicitly disclose the “establishing” step of claim 1 because, as stated in paragraph [0004] of the present application, Zingher et al. merely involves changing the order of print jobs and does not disclose establishing an order of adjustments and maintenance operations between a first and a subsequent print job. Also, in rejecting claim 1 at pages 7 and 8 of the December 29, 2009 Office Action, the Examiner does not even address the specific language of claim 1, because the Examiner does not state that Zingher et al. discloses that an order of changing the ink profile, the film thickness or the printing plate is established as a function of comparing first data of a first machine job to second data of a subsequent machine job as recited in claim 1.

It appears that the Examiner acknowledges the lack of explicit disclose and alleges that this step is inherently disclosed in Zingher et al. However, the Examiner does not establish that Zingher et al. inherently discloses the “establishing” step of claim 1, because the Examiner merely alleges that in Zingher et al. adjustments and maintenance operations may or can have to be established depending on the contents of the jobs to be printed because different jobs may require a different ink profile, a different film thickness or a different printing plate. It is respectfully submitted that the Examiner’s statements clearly do not provide sufficient evidence or reasoning to show that Zingher et al. necessarily discloses the “establishing” step of claim 1 and thus does not meet the burden of showing the Zingher et al. inherently discloses the “establishing” step of claim 1. (See MPEP 2112, *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd.

Pat. App. & Inter. 1990) ("In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art.") (emphasis in original) and *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) ("To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.' "). The support provided by the Examiner in attempting to establish that Zingher et al. discloses the "establishing" step of claim 1 at best demonstrates that an ink profile, a film thickness or a printing plate may or can be changed in some type of order that may or can depend on one or more print jobs. Thus, because the Examiner does not address the claim language or provide reasoning or evidence required by *Ex parte Levy*, the Examiner clearly does not meet his burden of establishing that Zingher et al. discloses the "establishing" step of claim 1. In addition, it is respectfully submitted that Loffler does not disclose the "establishing" step of claim 1 and one of skill in the art would not have had any reason to have modified Zingher et al. in view of Loffler to include this step.

It is also respectfully submitted that neither Zingher et al. nor Loffler, alone or in combination, discloses the limitation of claim 1 of "wherein the adjustments and maintenance operations to be carried out during the job change are performed on at least two different components of the printing press to prepare the at least two components for printing the subsequent machine job." The Examiner alleges that the ink adjusting metering element and the ink duct rollers of Loffler are the "at least two different components" required by claim 1. Loffler discloses that the ink adjusting metering element and the ink duct rollers are involved in a set order of adjustments and maintenance operations to adjust the ink profile if there is a difference between the two ink profiles. However, if no adjustment of the ink profile is necessary, the ink adjusting metering element and the ink duct rollers are not involved in adjusting the ink profile. Because no order of adjustments and maintenance operations involving the ink adjusting metering element and the ink duct rollers of Loffler are established based on the comparison of the two ink profiles in Loffler, the ink adjusting metering element and the ink duct

rollers of Loffler are different from the “at least two different components” required by claim 1. Thus, claim 1 is not unpatentable as obvious in view of Zingher et al. and Loffler for this additional reason.

Based on the foregoing, reversal of the rejection under 35 U.S.C. 103(a) of claims 1, 2, 17 to 22 and 25 is respectfully requested.

i. Claim 18: Argued Separately

Claim 18 recites “[t]he method as recited in claim 1 wherein the establishing step includes determining if a first of the adjustments and maintenance operations should occur prior to a second of the adjustments and maintenance operations.”

It is respectfully submitted that neither Zingher et al. nor Loffler, alone or in combination, discloses the limitation of claim 20 that the step of establishing an order of adjustments and maintenance operations to be carried out during a job change as a function of the comparing step includes “determining if a first of the operations should occur prior to a second of the operations.” The Examiner states that Zingher et al. discloses the “determining” step of claim 18. However, it is respectfully submitted that Zingher et al. clearly does not disclose the “determining” step of claim 18 because the “first of the operations” and the “second of the operations” of claim 18, which is directly dependent on claim 1, relate to adjustments and maintenance operations during a job change. Zingher et al. involves an establishing an order of print jobs, not an order of adjustments and maintenance operations between print jobs. Loffler also does not disclose the “determining” step of claim 18 because Loffler involves a set sequence of operations, not an order of adjustments and maintenance operations that is established based on a comparing step. Thus, because neither Zingher et al. nor Loffler, alone or in combination, discloses the limitations of claim 18, claim 18 is not unpatentable as obvious in view of these references.

For this additional reason, reversal of the rejection under 35 U.S.C. §103(a) of claim 18 is respectfully requested.

ii. Claim 19: Argued Separately

Claim 19 recites “[t]he method as recited in claim 1 wherein the establishing step includes identifying adjustments and maintenance operations to be carried out during the job change between the first machine job and the subsequent machine job and then determining when the adjustments and maintenance operations are to be carried out with respect to one another during the job change as a function of the comparing step.”

It is respectfully submitted that neither Zingher et al. nor Loffler, alone or in combination, discloses the limitations of claim 19 that the step of establishing an order of adjustments and maintenance operations to be carried out during a job change as a function of the comparing step includes “identifying adjustments and maintenance operations to be carried out during the job change between the first machine job and the subsequent machine job and then determining when the adjustments and maintenance operations are to be carried out with respect to one another during the job change as a function of the comparing step.” (emphasis added). The Examiner alleges that the limitations of claim 19 are disclosed in Zingher et al. In particular, addressing “and then determining when the adjustments and maintenance operations are to be carried out with respect to one another during the job change as a function of the comparing step” recited in claim 19, the Examiner states:

when determining how to change the operations in respect to comparing jobs, the system checks to see if a certain job can be placed between other jobs in order to determine what operations can be carried out in a printing sequence. Also, the system checks which adjustments associated with the job need to be performed during the job change in order to transition between jobs and have the least amount of work performed by the printing device as possible.” (The Office Action, pages 18 to 19).

It is respectfully submitted that the Examiner’s reasoning does not establish that Zingher et al. discloses that when adjustments and maintenance operations are to be carried out with respect to one another during a job change is determined as a function of comparing first data of a first machine job to second data of a subsequent machine job. In Zingher et al., the image contents of different print jobs are compared image element by image element as well as their respective color separations, making it possible to predict the operations for making printing forms and to establish the order of print jobs on the basis of the totality of operations. Thus, Zingher et al. discloses determining when the print jobs are to be carried out with respect to one

another and hence when the job changes are to be carried out with respect to one another. However, Zingher et al. does not disclose determining when adjustments and maintenance operations are to be carried out with respect to one another during any one of the job changes. Zingher et al. may establish the order of the print jobs and the order of the job changes, so that for example during a first print job and a subsequent print job (i.e., the first job change), only two operations are performed, but Zingher et al. does not disclose that when a first of the two operations is performed with respect to a second of the operations is determined as a function of comparing first data of a first print job to second data of a subsequent print job. Thus, Zingher et al. does not disclose the limitations of claim 19. Because Loffler also does not disclose the limitations of claim 19 and because one of skill in the art would not have had any reason to have modified Zingher et al. in view of Loffler to include the limitations of claim 19, claim 19 is not unpatentable as obvious in view of these references.

For this additional reason, reversal of the rejection under 35 U.S.C. §103(a) of claim 19 is respectfully requested.

iii. Claim 20: Argued Separately

Claim 20 recites “[t]he method as recited in claim 1 wherein the establishing step includes determining which steps can be performed concurrently and which steps must be performed consecutively.”

It is respectfully submitted that neither Zingher et al. nor Loffler, alone or in combination, discloses the limitation of claim 20 that the step of establishing an order of adjustments and maintenance operations to be carried out during a job change as a function of the comparing step includes “determining which steps can be performed concurrently and which steps must be performed consecutively.” The Examiner alleges in the Office Action, at page 22, that the “determining” in claim 20 is obvious in view of Loffler because “the system involves having multiple components within the printing press system operate in a concurrent manner. It also can decide to have some components work simultaneously while others are actuated after a certain process has been completed.” It is respectfully submitted that these statements by the Examiner completely fail to address the language of claim 20 and fail to articulate any reason why claim 20 would have been obvious to one of skill in the art in view of Zingher et al. and Loffler. The

Examiner does not address the requirement of claim 20 that “determining which steps can be performed concurrently and which steps must be performed consecutively” is performed as a function of the comparing step. Thus, because the Examiner has not established a prima facie case of the obviousness of claim 20 in view of Zingher et al. and Loffler, claim 20 is not unpatentable as obvious in view of these references.

For this additional reason, reversal of the rejection under 35 U.S.C. §103(a) of claim 20 is respectfully requested.

iv. Claim 21: Argued Separately

Claim 21 recites “[t]he method as recited in claim 3 wherein the order of adjustments and maintenance operations depends on the number of operating personnel of the printing-material processing machine in such a manner that an increased number of operating personnel results in an increased number of steps being performed concurrently.”

Claim 21 is dependent on claim 3. Because, the Examiner acknowledges that Zingher et al. and Loffler do not disclose all of the limitations of claim 3, claim 21 is not unpatentable as obvious in view of Zingher et al. and Loffler.

Furthermore, it is respectfully submitted that neither Zingher et al. nor Loffler, alone or in combination, discloses the limitation of claim 21 that “the order of adjustments and maintenance operations depends on the number of operating personnel of the printing-material processing machine in such a manner that an increased number of operating personnel results in an increased number of steps being performed concurrently.” The Examiner alleges that these limitations are disclosed in Loffler; however, it is respectfully submitted that Loffler clearly does not disclose these limitations because Loffler involves “the execution of an automatic sequence of operation.” (Loffler, col. 5, line 15). Thus, the order of adjustments and maintenance operations performed between two print jobs clearly would not depend on the number of operating personnel and the number of steps performed concurrently between two print jobs clearly would not depend on the number of operating personnel. Also, Zingher et al. does not cure this deficiency of Loffler because Zingher et al. does not involve an order of adjustments and maintenance operations performed between two print jobs. Thus, because neither Zingher et al. nor Loffler, alone or in

combination, discloses the limitations of claim 21, claim 21 is not unpatentable as obvious in view of these references.

For this additional reason, reversal of the rejection under 35 U.S.C. §103(a) of claim 21 is respectfully requested.

v. Claim 22: Argued Separately

Claim 22 recites “[t]he method as recited in claim 1 wherein a first component of the at least two components is an inking unit and a second component of the at least two components is a plate cylinder.”

It is respectfully submitted that neither Zingher et al. nor Loffler, alone or in combination, discloses establishing an order of adjustments and maintenance operations to be carried out during a job change as a function of comparing data of a first machine job to data of a subsequent machine, wherein the operations are to be carried out on at least “an inking unit” and “a plate cylinder” to prepare the “inking unit” and “plate cylinder” for printing the subsequent machine job, as required by the language of claim 22 and its dependency on claim 1. Loffler merely discloses a set order of processes to set an ink profile while changing print jobs and does not disclose establishing order of adjustments and maintenance operations to be carried out on at least “an inking unit” and “a plate cylinder” based on a comparison of data. Zingher et al. does not cure this deficiency of Loffler because Zingher et al. does not involve an order of adjustments and maintenance operations performed between two print jobs. Thus, because neither Zingher et al. nor Loffler, alone or in combination, discloses the limitations of claim 22, claim 22 is not unpatentable as obvious in view of these references.

For this additional reason, reversal of the rejection under 35 U.S.C. §103(a) of claim 22 is respectfully requested.

vi. Claim 25: Argued Separately

Claim 25 recites “[t]he method as recited in claim 1 wherein a first component of the at least two components and a second component of the at least two components are driven independently of one another.”



It is respectfully submitted that neither Zingher et al. nor Loffler, alone or in combination, discloses the limitation of claim 25 that “a first component of the at least two components and a second component of the at least two components are driven independently of one another.” The Examiner alleges that Loffler discloses the limitations of claim 25 because ink duct roller 23, vibrator roller 24 and inking unit 12 of Loffler are driven independently of one another. However, it is respectfully submitted that because no order of adjustments and maintenance operations involving ink duct roller 23, vibrator roller 24 and inking unit 12 are established based on the comparison of the two ink profiles in Loffler, ink duct roller 23, vibrator roller 24 and inking unit 12 of Loffler are different from the “components” required by claim 25. Zingher et al. does not cure this deficiency of Loffler because Zingher et al. does not involve an order of adjustments and maintenance operations performed between two print jobs. Thus, because neither Zingher et al. nor Loffler, alone or in combination, discloses the limitations of claim 25, claim 25 is not unpatentable as obvious in view of these references.

## 2. Claim 8: Argued Separately

Zingher et al. and Loffler are described above.

Claim 8 recites “[a] device for determining an optimum procedure for a job change on a printing-material processing machine comprising:

at least one control computer comparing first data of a first machine job to second data of a subsequent machine job, and executing program steps as a function of the comparing step to establish an order of operations to be carried out during the job change;

wherein the operations to be carried out during the job change are performed on at least two different components of the printing press to prepare the at least two components for printing the subsequent machine job.”

The Examiner alleges that Zingher et al. discloses “at least one control computer comparing first data of a first machine job to second data of a subsequent machine job, and executing program steps as a function of the comparing step to establish an order of operations to be carried out during the job change” of claim 8 and relies on the same reasoning discussed above with respect to claim 1. (The Office Action, pages 10 to 12). It is respectfully submitted that neither Zingher et al. nor Loffler, alone or in combination, discloses the “at least one control

computer” recited in claim 8. As similarly addressed at paragraph [0004] of the present application, Zingher et al. clearly does not explicitly disclose the “at least one control computer” of claim 8 because Zingher et al. merely involves changing the order of print jobs and does not disclose at least one control computer executing programs steps as a function of a comparison of first data of a first machine job to second data of a subsequent machine job to establish an **order of operations** to be carried out during a job change. It appears that the Examiner acknowledges the lack of explicit disclose and alleges that the “at least one control computer” of claim 8 is inherently disclosed in Zingher et al. However, the Examiner does not establish that Zingher et al. inherently discloses the “at least one control computer” of claim 8, because the Examiner merely alleges that in Zingher et al. operations **may** or **can** have to be established depending on the contents of the jobs to be printed because different jobs may require a different ink profile, a different film thickness or a different printing plate. The Examiner does not address the specific language of claim 8, because the Examiner does not assert that Zingher et al. discloses at least one computer control that establishes an **order** of changing the ink profile, the film thickness or the printing plate is established as a function of comparing first data of a first machine job to second data of a subsequent machine job.

Furthermore, it is respectfully submitted that the Examiner’s statements clearly do not provide sufficient evidence or reasoning to show that Zingher et al. **necessarily** discloses the “at least one control computer” of claim 8 and thus does not meet the burden of showing the Zingher et al. inherently discloses the “at least one control computer” of claim 8. (See MPEP 2112, *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (“In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic **necessarily** flows from the teachings of the applied prior art.”) (emphasis in original) and *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (“To establish inherency, the extrinsic evidence ‘must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.’ ”)). The support provided by the Examiner in attempting to establish that Zingher et al. discloses “at least one control

computer” of claim 8 at best demonstrates that an ink profile, a film thickness or a printing plate may or can be changed in some type of order that may or can depend on one or more print jobs. Thus, the Examiner clearly does not meet his burden of establishing that Zingher et al. discloses “at least one control computer” of claim 8. In addition, it is respectfully submitted that Loffler does not disclose “at least one control computer” of claim 8 and one of skill in the art would not have had any reason to have modified Zingher et al. in view of Loffler to include this limitation.

It is also respectfully submitted that neither Zingher et al. nor Loffler, alone or in combination, discloses “wherein the operations to be carried out during the job change are performed on at least two different components of the printing press to prepare the at least two components for printing the subsequent machine job” as recited in claim 8. The Examiner alleges that the ink adjusting metering element and the ink duct rollers of Loffler are the “at least two different components” required by claim 8. Loffler discloses that the ink adjusting metering element and the ink duct rollers are involved in a set order of adjustments and maintenance operations to adjust the ink profile if there is a difference between the two ink profiles. However, if no adjustment of the ink profile is necessary, the ink adjusting metering element and the ink duct rollers are not involved in adjusting the ink profile. Because no order of adjustments and maintenance operations involving the ink adjusting metering element and the ink duct rollers of Loffler are established based on the comparison of the two ink profiles in Loffler, the ink adjusting metering element and the ink duct rollers of Loffler are different from the “at least two different components” required by claim 8. Thus, claim 8 is not unpatentable as obvious in view of Zingher et al. and Loffler for this additional reason.

Based on the foregoing, reversal of the rejection under 35 U.S.C. 103(a) of claim 8 is respectfully requested.

### 3. Claim 13: Argued Separately

Zingher et al. and Loffler are described above.

Claim 13 recites “[a] printing press comprising:

a device for determining an optimum procedure for a job change between a first machine job and a subsequent machine job on a printing-material processing machine, the device

including at least one control computer comparing first data of the first machine job to second data of the subsequent machine job, and executing program steps as a function of the comparing step to establish an order of adjustments and maintenance operations to be carried out during the job change between the first machine job and the subsequent machine job;

wherein the adjustments and maintenance operations to be carried out during the job change are performed on at least two different components of the printing press to prepare the at least two components for printing the subsequent machine job.”

The Examiner alleges that Zingher et al. discloses “at least one control computer comparing first data of the first machine job to second data of the subsequent machine job, and executing program steps as a function of the comparing step to establish an order of adjustments and maintenance operations to be carried out during the job change between the first machine job and the subsequent machine job” of claim 13 and relies on the same reasoning discussed above with respect to claims 1 and 8. (The Office Action, pages 13 to 15). It is respectfully submitted that neither Zingher et al. nor Loffler, alone or in combination, discloses the “at least one control computer” recited in claim 13. As similarly addressed at paragraph [0004] of the present application, Zingher et al. clearly does not explicitly disclose the “at least one control computer” of claim 13 because Zingher et al. merely involves changing the order of print jobs and does not disclose at least one control computer executing programs steps as a function of a comparison of first data of a first machine job to second data of a subsequent machine job to establish an **order of adjustments and maintenance operations** to be carried out during a job change. It appears that the Examiner acknowledges the lack of explicit disclose and alleges that the “at least one control computer” of claim 13 is inherently disclosed in Zingher et al. However, the Examiner does not establish that Zingher et al. inherently discloses the “at least one control computer” of claim 13, because the Examiner merely alleges that in Zingher et al. operations **may** or **can** have to be established depending on the contents of the jobs to be printed because different jobs may require a different ink profile, a different film thickness or a different printing plate. The Examiner does not address the specific language of claim 13, because the Examiner does not assert that Zingher et al. discloses at least one computer control that establishes an **order** of changing the ink profile, the film thickness or the printing plate is established as a function of comparing first data of a first machine job to second data of a subsequent machine job.

Furthermore, it is respectfully submitted that the Examiner's statements clearly do not provide sufficient evidence or reasoning to show that Zingher et al. necessarily discloses the "at least one control computer" of claim 13 and thus does not meet the burden of showing the Zingher et al. inherently discloses the "at least one control computer" of claim 13. (See MPEP 2112, *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) ("In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art.") (emphasis in original) and *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) ("To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.' ")). The support provided by the Examiner in attempting to establish that Zingher et al. discloses "at least one control computer" of claim 13 at best demonstrates that an ink profile, a film thickness or a printing plate may or can be changed in some type of order that may or can depend on one or more print jobs. Thus, the Examiner clearly does not meet his burden of establishing that Zingher et al. discloses "at least one control computer" of claim 13. In addition, it is respectfully submitted that Loffler does not disclose "at least one control computer" of claim 13 and one of skill in the art would not have had any reason to have modified Zingher et al. in view of Loffler to include this limitation.

It is also respectfully submitted that neither Zingher et al. nor Loffler, alone or in combination, discloses "wherein the adjustments and maintenance operations to be carried out during the job change are performed on at least two different components of the printing press to prepare the at least two components for printing the subsequent machine job" as recited in claim 13. The Examiner alleges that the ink adjusting metering element and the ink duct rollers of Loffler are the "at least two different components" required by claim 13. Loffler discloses that the ink adjusting metering element and the ink duct rollers are involved in a set order of adjustments and maintenance operations to adjust the ink profile if there is a difference between the two ink profiles. However, if no adjustment of the ink profile is necessary, the ink adjusting

metering element and the ink duct rollers are not involved in adjusting the ink profile. Because no order of adjustments and maintenance operations involving the ink adjusting metering element and the ink duct rollers of Loffler are established based on the comparison of the two ink profiles in Loffler, the ink adjusting metering element and the ink duct rollers of Loffler are different from the “at least two different components” required by claim 13. Thus, claim 13 is not unpatentable as obvious in view of Zingher et al. and Loffler for this additional reason.

Based on the foregoing, reversal of the rejection under 35 U.S.C. 103(a) of claim 13 is respectfully requested.

B. Rejections under 35 U.S.C. 103(a): Zingher et al, Loffler and Rai et al.

Claim 3 was rejected under 35 U.S.C. 103(a) as being unpatentable over Zingher et al. as modified by Loffler and further in view of Rai et al..

1. Claim 3: Argued Separately

Zingher et al. and Loffler are described above. Rai et al. discloses a centralized server for providing analytic services to print shops which are located remotely from the centralized server. (Rai et al., paragraph [0013]).

Claim 3 recites “wherein a number of operating personnel of the printing-material processing machine is taken into account in the determination of the optimum procedure.”

Claim 3 is dependent on claim 1. Rai et al. does not disclose the “establishing” step required by the method of claim 1 and thus does not cure the deficiency of Zingher et al. and Loffler demonstrated above with respect to claim 1. Furthermore, one of ordinary skill in the art would not have modified Zingher in view of Rai et al. because Zingher mere involves arranging an order of print jobs to limi the amount of changes between consecutive print jobs, which is not dependent on the number of operating personnel. It is also respectfully submitted that one of skill in the art would not have had any reason to have taken into account the number of operating personal to determine the optimum procedure of setting up the ink profile in Loffler, because the procedure of setting up the ink profile in Loffler is “an *automatic* sequence of operation.” (Col. 5, line 15). If the sequence is automatic, the number of operating personal is irrelevant.

For these reasons, reversal of the rejection under 35 U.S.C. 103(a) of claim 3 is respectfully requested.

C. Rejections under 35 U.S.C. 103(a): Zingher et al, Loffler and Yacoub

Claim 4 was rejected under 35 U.S.C. 103(a) as being unpatentable over Zingher et al. as modified by Loffler and further in view of Yacoub.

1. Claim 4: Argued Separately

Zingher et al. and Loffler are described above. Yacoub discloses a networked printing solution which minimizes the necessity of user interaction in the printing process. (Yacoub, paragraph [0008]). A server or virtual printer automatically finds which printer is physically closest to a user. (Id., paragraph [0024]).

Claim 4 recites “[t]he method as recited in claim 1 wherein a length of paths to be traveled by operating personnel of the printing-material processing machine while carrying out the order of processes is taken into account in the determination of the optimum procedure.”

Claim 4 is dependent on claim 1. Yacoub does not disclose the “establishing” step required by the method of claim 1 and thus does not cure the deficiency of Zingher et al. and Loffler demonstrated above with respect to claim 1. Additionally, it is respectfully submitted that it would not have been obvious to one skilled in the art to modify Zingher in view of Yacoub to meet the claimed limitation because Yacoub does not disclose anything about an order of processes carried out by “operating personnel,” as is required by claim 4. The method in Yacoub merely includes automatically finding which printer is physically closest to a user, which is not clearly does not in any way involve an order of processes of a printing-material processing machine being carried out by operating personnel. It is also respectfully submitted that one of skill in the art would not have had any reason to have taken into account a length of paths to be traveled by operating personnel of the printing-material processing machine to determine the optimum procedure of setting up the ink profile in Loffler, because the procedure of setting up the ink profile in Loffler is “an *automatic* sequence of operation.” (Col. 5, line 15). In an automatic sequence, a length of paths to be traveled by operating personnel is irrelevant.

For these reasons, reversal of the rejection under 35 U.S.C. §103(a) of claim 4 is respectfully requested.

D. Rejections under 35 U.S.C. 103(a): Zingher et al, Loffler and Bauer

Claims 5, 6, 9 and 12 were rejected under 35 U.S.C. 103(a) as being unpatentable over Zingher et al. as modified by Loffler and further in view of Bauer (U.S. Pub. No. 2001/0039461).

1. Claims 5 and 6

Zingher and Loffler are described above. Bauer discloses an apparatus and method for planning and controlling production sequences which permits flexible scheduling and coordination of the print jobs. (Bauer, paragraph [0011]).

Claims 5 and 6 are dependent on claim 1. Bauer does not disclose the “establishing” step required by claim 1 and thus does not cure the deficiency of Zingher et al. and Loffler with respect to claim 1. In view of the arguments presented above explaining why claim 1 is not unpatentable as obvious in view of Zingher et al. and Loffler, withdrawal of the rejection under 35 U.S.C. 103(a) of claims 5 and 6 is respectfully requested.

i. Claim 5: Argued Separately

It is respectfully submitted that neither Zingher, Loffler nor Bauer discloses “the method as recited in claim 1 further comprising visually displaying the established order of processes to operating personnel” as recited in claim 5. Bauer discloses using the planning board to make changes to the display elements to permit scheduling and coordination of the production sequences, which is clearly different from the “displaying the established order of processes” (emphasis added) required by claim 5. (See Bauer paragraph [0013], [0020] and [0031] to [0032]).

For this additional reason, reversal of the rejection under 35 U.S.C. §103(a) of claim 5 is respectfully requested.

ii. Claim 6: Argued Separately

It is respectfully submitted that Zingher et al., Loffler, nor Bauer, alone or in combination, discloses “wherein the operating personnel are guided through individual steps of a calculated



order of processes via one or more display devices mounted on the printing-material processing machine” as recited in claim 6. Bauer shows that the display on a planning board can be changed, which is different from the guiding of personnel through “individual steps of a calculated order of processes” (emphasis added) required by claim 6. (See Bauer paragraph [0013], [0020] and [0031] to [0032]). The planning board only involves a changing order of print jobs and does not tell personnel when step are to be performed during a job change. Furthermore, it is respectfully submitted that one of skill in the art would have had no reason to have guided operating personnel through the individual steps of setting up the ink profile in Loffler, because the procedure of setting up the ink profile in Loffler is “an *automatic* sequence of operation” and there would have been no reason to have guided the personnel through any steps. (Col. 5, line 15).

For this additional reason, reversal of the rejection under 35 U.S.C. §103(a) of claim 6 is respectfully requested.

## 2. Claims 9 and 12

Zingher, Loffler and Bauer are described above.

Claims 9 and 12 are dependent on claim 8. Bauer does not disclose the “at least one control computer” required by claim 8 and thus does not cure the deficiency of Zingher et al. and Loffler with respect to claim 8. In view of the arguments presented above explaining why claim 8 is not unpatentable as obvious in view of Zingher et al. and Loffler, withdrawal of the rejection under 35 U.S.C. 103(a) of claims 9 and 12 is respectfully requested.

## E. Rejections under 35 U.S.C. 103(a): Zingher et al, Loffler, Bauer and Tada

Claims 7 and 10 were rejected under 35 U.S.C. 103(a) as being unpatentable over Zingher as modified by Loffler and Bauer and further in view of Tada et al. (U.S. Patent 4,572,652).

### 1. Claim 7

Zingher et al., Loffler and Bauer are described above. Tada et al. discloses a copying machine which indicates to an operator how to use the copying machine from time to time.”

(Abstract).

Claim 7 is dependent on claim 1. Tada et al. does not disclose the “establishing” step required by the method of claim 1 and thus does not cure the deficiency of Zingher et al., Loffler and Bauer discussed above with respect to claim 1. Thus, none of these cited references, alone or in combination, discloses the limitations of claim 7 and claim 7 is not unpatentable as obvious in view of these references. Reversal of the rejection under 35 U.S.C. §103(a) of claim 7 is respectfully requested.

## 2. Claim 10

Zingher et al., Loffler, Bauer and Tada et al. are described above.

Dependent claim 10 recites “[t]he device as recited in claim 8 further comprising a system for acoustic communication of the established order of operations to operating personnel.”

Claim 10 is dependent on claim 8. Tada et al. does not disclose the “at least one control computer” recited in claim 8 and thus does not cure the deficiency of Zingher et al., Loffler and Bauer discussed above with respect to claim 8. Thus, none of these cited references, alone or in combination, discloses the limitations of claim 10 and claim 10 is not unpatentable as obvious in view of these references. Reversal of the rejection under 35 U.S.C. §103(a) of claim 10 is respectfully requested.

## F. Rejections under 35 U.S.C. 103(a): Zingher et al, Loffler, Bauer, Noyes et al. and Silvester

Claim 11 was rejected under 35 U.S.C. 103(a) as being unpatentable over Zingher et al. as modified by Loffler, Bauer and Tada and further in view of Silvester (U.S. Pub. No. 2003/0161292).

Zingher et al., Loffler, Bauer and Noyes et al. are described above. Silvester discloses that various devices may participate in a piconet with a host computer (Paragraph [0004]).

Claim 11 is dependent on claim 8. Silvester does not disclose the “at least one control

computer” required by claim 8 and thus does not cure the deficiency of Zingher et al., Loffler, Bauer and Noyes et al. with respect to claim 8. In view of the arguments presented above explaining why claim 8 is not unpatentable as obvious in view of Zingher et al. and Loffler, withdrawal of the rejection under 35 U.S.C. 103(a) of claim 11 is respectfully requested.

G. Rejections under 35 U.S.C. 103(a): Zingher et al, Loffler and Pfeiffer et al.

Claims 14, 15, 23 and 24 were rejected under 35 U.S.C. 103(a) as being unpatentable over Zingher et al. as modified by Loffler and further in view of Pfeiffer et al. (U.S. 5,447,102).

1. Claims 14 and 15

Zingher et al. and Loffler are described above. Pfeiffer et al. discloses a process of reducing an ink profile while changing print jobs on a rotary press. (Pfeiffer et al., col. 1, lines 63 to 69). The process includes disengaging the vibrator roller and throwing the printing cylinder on impression to print on paper so that ink on ink rollers is reduced to a thin level. (Id., col. 2, lines 5 to 11). Then, the plate cylinder is thrown off impression so the blanket on the blanket cylinder can be cleaned and the printing plate on the plate cylinder can be replaced. (Id., col. 2, lines 11 to 22). After the blanket is cleaned, the vibrator roller is re-engaged and a new ink profile is produced on the ink rollers. (Id., col. 2, lines 22 to 30).

Claims 14 and 15 are dependent on claim 13. Pfeiffer et al. et al. does not disclose the “at least one control computer” required by claim 13 and thus does not cure the deficiency of Zingher et al. and Loffler with respect to claim 13. In view of the arguments presented above explaining why claim 8 is not unpatentable as obvious in view of Zingher et al. and Loffler, withdrawal of the rejection under 35 U.S.C. 103(a) of claims 14 and 15 is respectfully requested.

2. Claims 23 and 24

Zingher et al., Loffler and Pfeiffer et al. are described above.

Claims 23 and 24 are dependent on claim 1. Pfeiffer et al. does not disclose the “establishing” step required by claim 1 and thus does not cure the deficiency of Zingher et al. and Loffler with respect to claim 1. In view of the arguments presented above explaining why claim 1 is not unpatentable as obvious in view of Zingher et al. and Loffler, withdrawal of the rejection

under 35 U.S.C. 103(a) of claims 23 and 24 is respectfully requested.

i. Claim 23: Argued Separately

Claim 23 recites “[t]he method as recited in claim 1 wherein one of the at least two components is an offset printing cylinder.”

It is respectfully submitted that neither Zingher et al., Loffler nor Pfeiffer et al., alone or in combination, discloses establishing an order of adjustments and maintenance operations to be carried out during a job change as a function of comparing data of a first machine job to data of a subsequent machine, wherein the operations are to be carried out on at least “an offset printing cylinder” to prepare the “offset printing cylinder” for printing the subsequent machine job as required by claim 23. Pfeiffer et al. merely discloses performing a set order of processes to reduce an ink profile while changing print jobs and does not disclose establishing an order of operations to be carried out on at least “an offset printing cylinder” based on a comparison of data. Thus, because neither Zingher et al., Loffler nor Pfeiffer et al., alone or in combination, discloses the limitations of claim 23, claim 23 is not unpatentable as obvious in view of these references.

For this additional reason, reversal of the rejection under 35 U.S.C. §103(a) of claim 23 is respectfully requested.

ii. Claim 24: Argued Separately

Claim 24 recites “[t]he method as recited in claim 1 wherein one of the at least two components is a coating unit.”

It is respectfully submitted that neither Zingher et al., Loffler nor Pfeiffer et al., alone or in combination, discloses establishing an order of adjustments and maintenance operations to be carried out during a job change as a function of comparing data of a first machine job to data of a subsequent machine, wherein the operations are to be carried out on at least a “coating unit” to prepare the “coating unit” for printing the subsequent machine job as required by the language of claim 24 and its dependency on claim 1. Pfeiffer et al. merely discloses a set order of processes to reduce an ink profile while changing print jobs and does not disclose establishing order of operations to be carried out on at least a “coating unit” based on a comparison of data. Thus, because neither Zingher et al., Loffler nor Pfeiffer et al., alone or in combination, discloses the

limitations of claim 24, claim 24 is not unpatentable as obvious in view of these references.

For this additional reason, reversal of the rejection under 35 U.S.C. §103(a) of claim 23 is respectfully requested.

H. Rejections under 35 U.S.C. 103(a): Zingher et al, Loffler, Bauer and Jackson et al.

Claim 16 was rejected under 35 U.S.C. 103(a) as being unpatentable over Zingher et al. in view of Loffler, Bauer and Jackson et al.

Zingher et al., Loffler and Bauer are described above. Jackson et al. discloses a job cost module that “contains information regarding the speed and time required to perform the print job.” (Jackson et al., col. 5, lines 21 to 24).

Claim 16 recites “[t]he method as recited in claim 1 wherein the establishing step includes accessing a table containing durations of the adjustments and maintenance operations.”

Claim 16 is dependent on claim 1. Jackson et al. does not disclose the “establishing” step required by the method of claim 1 and thus does not cure the deficiency of Zingher et al., Loffler and Bauer demonstrated above with respect to claim 1. Additionally, it is respectfully submitted that neither Zingher et al., Loffler, Bauer nor Jackson et al. discloses a step of establishing an order of adjustments and maintenance operations to be carried out during the job change including “accessing a table containing durations of the adjustments and maintenance operations” as required by claim 16. Because the job cost module 14 in Jackson et al. merely contains information regarding the time it takes a printer to complete a print job and in no way relates to a job change Jackson et al. does not disclose the limitations of claim 16. Furthermore, the Examiner has failed to provide any reason why one of skill in the art would have accessed a table containing durations of operations to adjust (or not adjust) the ink profile in Loffler, which the Examiner alleges to disclose the “establishing” step of claim 1. Thus, because neither Zingher et al., Loffler, Bauer nor Jackson et al., alone or in combination, discloses the limitations of claim 16, claim 16 is not unpatentable as obvious in view of these references.

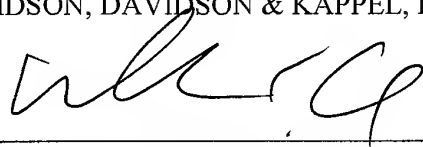
For these reasons, reversal of the rejection under 35 U.S.C. §103(a) of claim 16 is respectfully requested.

CONCLUSION

It is respectfully submitted that the application is in condition for allowance. Favorable consideration of this appeal brief is respectfully requested.

Respectfully submitted,

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**APPENDIX A:**

PENDING CLAIMS 1 to 25 of  
U.S. APPLICATION SERIAL NO. 10/661,263

Claim 1 (previously presented): A method for determining an optimum procedure for a job change between a first machine job and a subsequent machine job on a printing-material processing machine having at least one control computer, the method comprising:

comparing first data of the first machine job to second data of the subsequent machine job using the at least one control computer, and

establishing an order of adjustments and maintenance operations to be carried out during the job change between the first machine job and the subsequent machine job as a function of the comparing step;

wherein the adjustments and maintenance operations to be carried out during the job change are performed on at least two different components of the printing press to prepare the at least two components for printing the subsequent machine job.

Claim 2 (previously presented): The method as recited in claim 1 wherein the order of the adjustments and maintenance operations to be carried out during the job change is calculated in such a manner that a set-up time or a downtime during the job change is minimized.

Claim 3 (original): The method as recited in claim 1 wherein a number of operating personnel of the printing-material processing machine is taken into account in the determination of the optimum procedure.

Claim 4 (original): The method as recited in claim 1 wherein a length of paths to be traveled by operating personnel of the printing-material processing machine while carrying out the order of processes is taken into account in the determination of the optimum procedure.

Claim 5 (original): The method as recited in claim 1 further comprising visually displaying the established order of processes to operating personnel.

Claim 6 (previously presented): The method as recited in claim 5 wherein the operating personnel are guided through individual steps of a calculated order of processes via one or more display devices mounted on the printing-material processing machine.

Claim 7 (original): The method as recited in claim 1 wherein the established order of processes is communicated to operating personnel in acoustic form.

Claim 8 (previously presented): A device for determining an optimum procedure for a job change on a printing-material processing machine comprising:

at least one control computer comparing first data of a first machine job to second data of a subsequent machine job, and executing program steps as a function of the comparing step to establish an order of operations to be carried out during the job change;

wherein the operations to be carried out during the job change are performed on at least two different components of the printing press to prepare the at least two components for printing the subsequent machine job.



Claim 9 (original): The device as recited in claim 8 further comprising one or more display devices for displaying the order of operations.

Claim 10 (original): The device as recited in claim 8 further comprising a system for acoustic communication of the established order of operations to operating personnel.

Claim 11 (original): The device as recited in claim 10 wherein the system for acoustic communication includes at least one headset wirelessly connected to the control computer.

Claim 12 (original): The device as recited in claim 1 further comprising a display device or a system for acoustic communication for communicating information or errors.

Claim 13 (previously presented): A printing press comprising:

a device for determining an optimum procedure for a job change between a first machine job and a subsequent machine job on a printing-material processing machine, the device including at least one control computer comparing first data of a the first machine job to second data of the subsequent machine job, and executing program steps as a function of the comparing step to establish an order of adjustments and maintenance operations to be carried out during the job change between the first machine job and the subsequent machine job;

wherein the adjustments and maintenance operations to be carried out during the job change are performed on at least two different components of the printing press to prepare the at least two components for printing the subsequent machine job.

Claim 14 (original): The printing press as recited in claim 13 further comprising at least one main drive for driving printing cylinders and plate cylinders or a blanket cylinder as well as separately driven inking units and inking rollers that can be turned off.

Claim 15 (original): The printing press as recited in claim 13 further comprising individual drives for driving cylinders or additional driven components.

Claim 16 (previously presented): The method as recited in claim 1 wherein the establishing step includes accessing a table containing durations of the adjustments and maintenance operations.

Claim 17 (previously presented): The method as recited in claim 1 wherein the establishing of the order of the adjustments and maintenance operations is based solely on the comparing of the first data to the second data.

Claim 18 (previously presented): The method as recited in claim 1 wherein the establishing step includes determining if a first of the adjustments and maintenance operations should occur prior to a second of the adjustments and maintenance operations.

Claim 19 (previously presented): The method as recited in claim 1 wherein the establishing step includes identifying adjustments and maintenance operations to be carried out during the job change between the first machine job and the subsequent machine job and then determining when the adjustments and maintenance operations are to be carried out with respect to one another during the job change as a function of the comparing step.

Claim 20 (previously presented): The method as recited in claim 1 wherein the establishing step includes determining which steps can be performed concurrently and which steps must be performed consecutively.

Claim 21 (previously presented): The method as recited in claim 3 wherein the order of adjustments and maintenance operations depends on the number of operating personnel of the printing-material processing machine in such a manner that an increased number of operating personnel results in an increased number of steps being performed concurrently.

Claim 22 (previously presented): The method as recited in claim 1 wherein a first component of the at least two components is an inking unit and a second component of the at least two components is a plate cylinder.

Claim 23 (previously presented): The method as recited in claim 1 wherein one of the at least two components is an offset printing cylinder.

Claim 24 (previously presented): The method as recited in claim 1 wherein one of the at least two components is a coating unit.

Claim 25 (previously presented): The method as recited in claim 1 wherein a first component of the at least two components and a second component of the at least two components are driven independently of one another.

## **APPENDIX B**

### Evidence Appendix under 37 C.F.R. §41.37 (c) (ix):

No evidence pursuant to 37 C.F.R. §§1.130, 1.131 or 1.132 and relied upon in the appeal has been submitted by appellants or entered by the examiner.

## **APPENDIX C**

### Related proceedings appendix under 37 C.F.R. §41.37 (c) (x):

As stated in “2. RELATED APPEALS AND INTERFERENCES” of this appeal brief, appellants, their legal representatives, and assignee are not aware of any appeal or interference that directly affects, will be directly affected by, or will have a bearing on the Board’s decision in this appeal.